

IN THE CLAIMS

CANCEL claim 1.

AMEND claims 2 - 4, 7, 10, 12, 14 and 15 to read as follows:

2. (Amended) A high-frequency semiconductor device as set forth in claim ~~1~~, wherein said antenna connection is an antenna line of a patterned conductor.

a' 3. (Amended) A high-frequency semiconductor device as set forth in claim ~~1~~, wherein said antenna connection is an active region formed in said semiconductor substrate.

b 4. (Amended) A high-frequency semiconductor device comprising:
an antenna-ground plane provided above a semiconductor substrate, to be connected to the ground potential;

a patch electrode⁶ provided on said antenna-ground plane with an interlayer insulation film therebetween;

an antenna connection^{6a} provided under said antenna-ground plane and connected to said patch electrode via a through-hole⁷ formed passing through said antenna-ground plane; and

a line conductor provided above said semiconductor substrate, said line conductor forming a high-frequency transmission line together with the ground potential.

11/1. (Amended) A high-frequency semiconductor device comprising:
B an antenna-ground plane provided above a semiconductor substrate, to be connected to the^a
ground potential;

a patch electrode provided on said antenna-ground plane with an interlayer insulation film
therebetween;

G2 an antenna connection provided under said antenna-ground plane and connected to said
patch electrode via a through-hole formed passing through said antenna-ground plane; and

a line conductor provided on said antenna-ground plane with an interlayer insulation film
therebetween, said line conductor forming a high-frequency transmission line together with said
antenna-ground plane.

14/10. (Amended) A high-frequency semiconductor device comprising:

B an antenna-ground plane provided above a semiconductor substrate, to be connected to the^a
ground potential;

G3 a patch electrode provided on said antenna-ground plane with an interlayer insulation film
therebetween and;

an antenna connection provided under said antenna-ground plane and connected to said patch
electrode via a through-hole formed passing through said antenna-ground plane;

wherein a passive device is provided under said antenna-ground plane.

A

Q46 ¹² (Amended) A high-frequency semiconductor device as set forth in claim ¹4, wherein said interlayer insulation film is composed of a resin insulating material.

Q5 ¹⁴ (Amended) A high-frequency semiconductor device as set forth in claim ¹4, wherein said patch electrode has a rectangular shape or a circular shape.

9 ¹⁵ (Amended) A high-frequency semiconductor device as set forth in claim ¹4, wherein each of said patch electrode and antenna-ground plane is formed of a high conductive material.